

Engineering Institute

For years Los Alamos National Laboratory taught a summer school program focused on engineering for undergraduate students. In 2002, the Engineering Science and Application Division, or ESA, at Los Alamos and the University of California, San Diego, or UCSD, Jacobs School of Engineering joined to propose the establishment of an Engineering Institute to be located at the Los Alamos Research Park.

While the Los Alamos Dynamic Summer School program was attracting undergraduate students from around the country, the Institute's main focus, which includes the Summer School program, was to be a different student—professionals looking for advancement. The Institute was proposed as a multi-disciplinary engineering education and research and development center to educate students and professionals in structural dynamics.

Because there are numerous engineering institutes that offer classes and programs similar to those ESA and UCSD were proposing, they decided to ask for help from the MBA Summer Internship program.

Amy Meyer, MBA intern from Stanford University, decided to work on this project because of her interest in education and background in mechanical engineering. This project was different from the other MBA projects. Instead of requiring the intern to research the market for a business based on a Los Alamos technology, it required her to assess the market for a school based on the reputation of the Laboratory and UCSD.

Meyer analyzed the market for a new institute by determining the size of the pool of competition, what kinds of courses and programs should be offered, and how many students would be interested in the topics the Institute proposed to offer. She also conducted a survey of professional engineers working at large corporations to determine if the programs being proposed by the Institute would be of interest. She was able to offer useful information about the programs proposed, marketing tips on how to get students interested and into the Institute, and she also researched the budget to determine a cost structure and provide estimates of revenue and funds needed to start the Institute. Meyer was able to look at almost every aspect of the Institute

to make recommendations on improvements and how ESA and UCSD should move forward with the proposal.

"I learned that there is a lot more work than most people realize involved in starting something like the Engineering Institute," Meyer said. "It really takes many people at many levels working together with a unified vision to implement this. I also learned that implementing change at large organizations takes time and getting the right decision makers involved."

In April 2003, the Engineering Institute was established.

"She [Meyer] did do some traditional MBA things for us like a market survey for the Institute," said Los Alamos National Laboratory Engineering Institute Director Charles Farrar. "But there were a lot of other things too. She did a lot of preliminary work on what the facility should look like, what it should cost, and she did some almost borderline architecture construction management and researched what educational programs were appropriate. Her work was very useful and basically reinforced that all of our plans for the institute were correct."

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Amy Meyer, 2002 MBA intern from Stanford University